

=> b reg

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STRUCTURE FILE UPDATES: 13 MAR 2006 HIGHEST RN 876655-59-3

DICTIONARY FILE UPDATES: 13 MAR 2006 HIGHEST RN 876655-59-3

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
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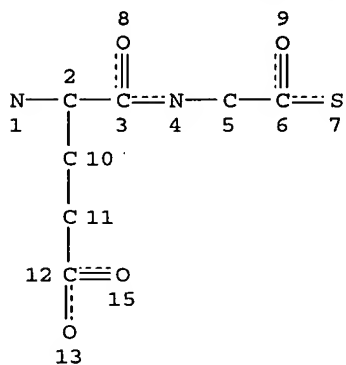
Structure search iteration limits have been increased. See HELP SLIMITS for details.

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<http://www.cas.org/ONLINE/UG/regprops.html>

=> d que sta l10

L8 STR



NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1

CONNECT IS M2 RC AT 5

CONNECT IS M1 RC AT 7

CONNECT IS M2 RC AT 13

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L10 3 SEA FILE=REGISTRY SSS FUL L8

100.0% PROCESSED 1624 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

=> b hcap

FILE 'HCAPLUS' ENTERED AT 07:12:43 ON 15 MAR 2006

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FILE COVERS 1907 - 15 Mar 2006 VOL 144 ISS 12

FILE LAST UPDATED: 14 Mar 2006 (20060314/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr l12 tot

L12 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:851189 HCAPLUS

DN 135:371999

ED. Entered STN: 23 Nov 2001

TI Ligation method and reagents to form an amide bond

IN Raines, Ronald T.; Kiessling, Laura L.; Nilsson, Bradley L.

PA Wisconsin Alumni Research Foundation, USA

SO PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 6

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2001087920	A2	20011122	2001WO-US15440	20010511 <--
	WO2001087920	A3	20040108		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

APP?

CA---2405105	AA	20011122	2001CA-2405105	20010511 <--
AU2001061530	A5	20011126	2001AU-0061530	20010511 <--
JP2004501103	T2	20040115	2001JP-0585139	20010511 <--
EP---1399465	A2	20040324	2001EP-0935432	20010511 <--
EP---1399465	B1	20050413		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
AT---293125	E	20050415	2001AT-0935432	20010511 <--
US2004087779	A1	20040506	2003US-0276515	20030123 <--
US--(6972320)	B2	20051206		
US2005048192	A1	20050303	2004US-0930702	20040830 <--
PRAI 2000US-203994P	P	20000512	<--	
2000US-209373P	P	20000605	<--	
2000US-255626P	P	20001213	<--	
2001WO-US15440	W	20010511	<--	
2003US-0276515	A2	20030123		
2003US-499231P	P	20030829		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001087920	ICM	C07K
	IPCI	C07K [ICM,7]
	IPCR	C07F0009-00 [I,C]; C07F0009-48 [I,A]; C07F0009-50 [I,A]; C07K0001-00 [I,C]; C07K0001-08 [I,A]
	ECLA	C07F009/48C; C07F009/50A4+M; C07F009/50A1+M; C07K001/08A
CA---2405105	IPCI	C07K0001-08 [ICM,7]; C07K0001-00 [ICS,7]; C07F0009-48 [ICS,7]; C07F0009-50 [ICS,7]
JP2004501103	IPCI	C07K0001-06 [ICM,7]; C07K0001-12 [ICS,7]; C07K0001-13 [ICS,7]
	FTERM	4H045/AA20; 4H045/BA10; 4H045/BA53; 4H045/BA54; 4H045/BA55; 4H045/FA32; 4H045/FA43; 4H045/FA52
EP---1399465	IPCI	C07K0001-00 [ICM,7]
	IPCR	C07F0009-00 [I,C]; C07F0009-48 [I,A]; C07F0009-50 [I,A]; C07K0001-00 [I,C]; C07K0001-08 [I,A]
AT---293125	IPCI	C07K0001-00 [ICM,7]
US2004087779	IPCI	C07K0001-04 [ICM,7]; C07F0009-28 [ICS,7]; C07C0231-10 [ICS,7]; C07F0009-50 [ICS,7]; C07K0001-02 [ICS,7]; C07K0001-04 [ICS,7]; C07K0001-08 [ICS,7]
	IPCR	C07F0009-00 [I,C]; C07F0009-50 [I,A]; C07K0001-00 [I,C]; C07K0001-08 [I,A]; C07K0001-107 [I,A]
	NCL	530/409.000
	ECLA	C07F009/50A1+M; C07F009/50A4+M; C07F009/50Z1; C07K001/08A; C07K001/107D; C07K001/107D4
US2005048192	IPCI	A61L0002-00 [ICM,7]
	IPCR	C07F0009-00 [I,C]; C07F0009-48 [I,A]; C07F0009-50 [I,A]; C07K0001-00 [I,C]; C07K0001-08 [I,A]; C07K0001-107 [I,A]
	NCL	427/002.110
	ECLA	C07F009/48C; C07F009/50A1+M; C07F009/50A4+M; C07F009/50Z1; C07K001/08A; C07K001/107D; C07K001/107D4

OS CASREACT 135:371999; MARPAT 135:371999

AB Amide bond formation involves reaction of a phosphinothioester of an amino acid, peptide or protein with an azide of an amino acid, peptide or protein and is useful in the synthesis of peptides and proteins. Thus, treatment of Ac-L-Phe-SCH₂PPh₂ with N₃CH₂CONHCH₂Ph (syntheses given) in THF/H₂O afforded 92% Ac-L-Phe-Gly-NHCH₂Ph.

ST ligation method peptide coupling phosphino thioester azide

IT. Peptide coupling

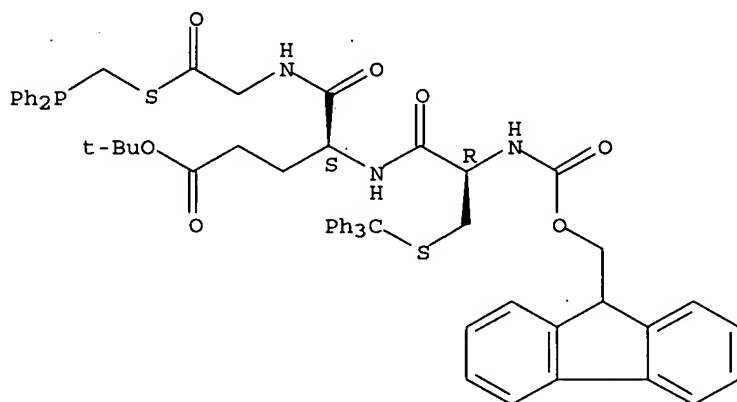
(ligation method and reagents to form an amide bond)

IT 100-46-9, Benzylamine, reactions 543-24-8, n-Acetyl glycine 598-21-0, Bromoacetyl bromide 1983-26-2, Chloromethylphosphonic dichloride 2018-61-3, n-Acetyl-L-phenylalanine 20938-74-3, n-Methylmercaptoacetamide 289884-70-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(ligation method and reagents to form an amide bond)
 IT 1806-49-1P 116433-53-5P 119327-17-2P 160693-57-2P 289038-91-1P
 289038-92-2P 289038-93-3P 289038-94-4P 289038-95-5P 324753-11-9P
 324753-12-0P 324753-13-1P 324753-14-2P 324753-16-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (ligation method and reagents to form an amide bond)
 IT 69753-67-9P 373643-46-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (ligation method and reagents to form an amide bond)
 IT 373643-46-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (ligation method and reagents to form an amide bond)
 RN 373643-46-0 HCAPLUS
 CN Glycine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-S-(triphenylmethyl)-L-
 cysteinyl-L- α -glutamylthio-, 2-(1,1-dimethylethyl)
 3-S-[(diphenylphosphino)methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

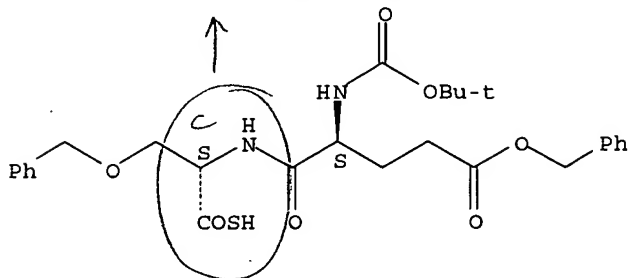


L12 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:449878 HCAPLUS
 DN 119:49878
 ED Entered STN: 07 Aug 1993
 TI Preparation of peptide thioacids using the Kaiser oxime resin
 AU Schwabacher, Alan W.; Maynard, Terry L.
 CS Dep. Chem., Iowa State Univ., Ames, IA, 50011, USA
 SO Tetrahedron Letters (1993), 34(8), 1269-70
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 CC 34-3 (Amino Acids, Peptides, and Proteins)
 OS CASREACT 119:49878
 AB Peptide C-terminal thioacids are readily prepared with protecting groups
 intact by cleavage of peptides from Kaiser's oxime ester resin by
 treatment with hexamethyldisilathiane/tetrabutylammonium fluoride. Such
 thioacids are useful for peptide fragment couplings.
 ST Merrifield synthesis peptide thioacid; thiolysis peptide resin
 hexamethyldisilathiane; sulfide hexamethyldisilyl thiolysis peptide resin;
 thio amino acid peptide
 IT Merrifield synthesis
 (of peptide thioacids via thiolysis of resin-bound acids and peptides
 with hexamethyldisilathiane and fluoride)
 IT Amino acids, preparation
 Peptides, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (thio-, preparation of, via thiolysis of oxime resin-bound derivs. with

- hexamethyldisilathiane and fluoride)
- IT Solvolysis
(thiolysis, of resin-bound amino acids and peptides with hexamethyldisilathiane and fluoride, thioacids from)
- IT 80354-38-7P 81000-39-7P 148529-77-5P 148529-78-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, via thiolysis of oxime resin-bound amino acid with hexamethyldisilathiane and fluoride)
- IT 148529-79-7P 148529-80-0P 148529-81-1P 148529-83-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, via thiolysis of oxime resin-bound peptide with hexamethyldisilathiane and fluoride)
- IT 3385-94-2, Hexamethyldisilathiane
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiolysis by fluoride and, of resin-bound amino acids and peptides, thioacids from)
- IT 7536-58-5D, N-tert-Butoxycarbonylaspartic acid β -benzyl ester, oxime resin-bound 13734-34-4D, oxime resin-bound 15761-38-3D, N-tert-Butoxycarbonylalanine, oxime resin-bound 23680-31-1D, oxime resin-bound 77385-58-1D, oxime resin-bound 79141-09-6D, oxime resin-bound 124194-48-5D, oxime resin-bound 148529-82-2D, oxime resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiolysis of, with hexamethyldisilathiane and fluoride, thioacid from)
- IT 148529-83-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, via thiolysis of oxime resin-bound peptide with hexamethyldisilathiane and fluoride)
- RN 148529-83-3 HCAPLUS
- CN L-Serine, N-[N-[(1,1-dimethylethoxy)carbonyl]-L- α -glutamyl]-O-(phenylmethyl)-1-thio-, 5-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Need another C in here



- L12 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 1990:406813 HCAPLUS
- DN 113:6813
- ED Entered STN: 06 Jul 1990
- TI Peptidylarginyl nitroanilides as enzyme (trypsin) substrates
- IN Kuroiwa, Katsumasa; Matsuura, Hitoshi; Katayama, Katsuhiko; Nakatsuyama, Shuichi; Nagasawa, Takeshi; Endo, Koji
- PA Nitto Boseki Co., Ltd., Japan
- SO Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
- DT Patent
- LA English
- IC ICM C07K-0005/08
ICS C07K-0001/00; C12Q-0001/38
- CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 7
- FAN.CNT 1

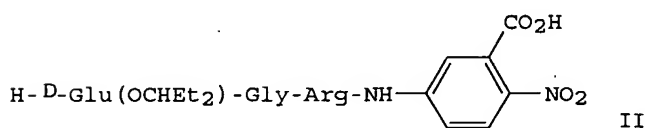
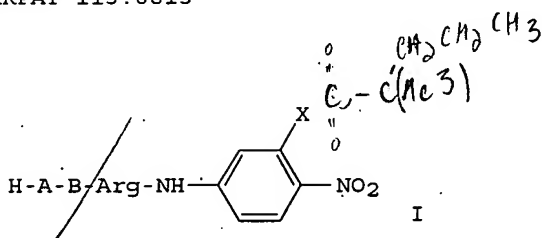
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP----347734	A2	19891227	1989EP-0110781	19890614 <--

EP----347734 A3 19900411
 R: CH, DE, LI, SE
 JP--02003660 A2 19900109 1988JP-0146089 19880614 <--
 JP--08022842 B4 19960306
 JP--02023889 A2 19900126 1988JP-0173788 19880714 <--
 JP--07038799 B4 19950501
 US---5115099 A 19920519 1989US-0365418 19890613 <--
 EP----513863 A1 19921119 1992EP-0113199 19890614 <--
 EP----513863 B1 19970903
 R: CH, DE, LI, SE
 PRAI 1988JP-0146089 A 19880614 <--
 1988JP-0173788 A 19880714 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 347734	ICM	C07K-0005/08
	ICS	C07K-0001/00; C12Q-0001/38
	IPCI	C07K0005-08 [ICM,4]; C07K0001-00 [ICS,4]; C12Q0001-38 [ICS,4]
	IPCR	C07K0005-00 [I,C]; C07K0005-093 [I,A]; C07K0005-097 [I,A]
JP--02003660	IPCI	C07C0279-12 [ICM,5]; C12Q0001-37 [ICA,5]; C12Q0001-56 [ICA,5]
JP--02023889	IPCI	C12Q0001-37 [ICM,5]; C07K0005-08 [ICS,5]
US---5115099	IPCI	C07K0005-08 [ICM,4]; C07K0001-06 [ICS,4]; C12Q0001-38 [ICS,4]
	IPCR	C07K0005-00 [I,C]; C07K0005-093 [I,A]; C07K0005-097 [I,A]
	NCL	530/331.000; 435/023.000; 530/337.000
EP----513863	IPCI	C07K0005-08 [ICM,5]; C07C0279-14 [ICS,5]; C12Q0001-37 [ICS,5]
	ECLA	C07K005/02B

OS MARPAT 113:6813
 GI



AB The title compds. [I; A = pyroglutamyl, D-Glu(OR), D-Glu(NR1R2); B = Gly, Pro, Ala, sarcosyl, 2-piperidinecarboxyl; R = H, alkyl, cycloalkyl; R1, R2 = H, alkyl, cycloalkyl; NR1R2 = heterocyclyl; X = H, CO2H, alkoxycarbonyl, benzyloxycarbonyl, alkylcarbamoyl], were prepared Thus, BOC-D-Glu(OCHET2)-Gly-OH (preparation given) was activated by conversion to the 4,6-dimethylpyrimidine-2-thioester. The latter in DMF was added to the B = bond, X = CO2CMe3 (pretreated with N-ethylmorpholine) in DMF with ice cooling followed by stirring overnight to give 80% coupling product, which was hydrolyzed with 2N HCl/HOAc to give 90% II. I were useful in determination of trypsin and α2-Macroglobulin-trypsin complex spectroscopically at 405 nm.

ST arginylnitroanilide enzyme substrate; peptidylarginylnitroanilide enzyme substrate; trypsin detn peptidylarginylnitroanilide

IT Peptides, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)
 (peptidylarginylnitroanilides, preparation of as enzyme substrates)

IT Enzymes
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (substrates, peptidylarginylnitroanilides as)

IT Macroglobulins
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (α 2-, complexes with trypsin, peptidylarginylnitroanilides as
 substrates for)

IT 1738-76-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling of with glutamic acid derivative, in preparation of enzyme substrate)

IT 35897-34-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling of, with aminonitrobenzoate, in preparation of enzyme substrate)

IT 127428-15-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling of, with arginine derivative, in preparation of enzyme substrate)

IT 584-02-1, 3-Pentanol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification of, with glutamic acid derivative, in preparation of enzyme
 substrate)

IT 34404-30-3, BOC-D-Glu-OBzl
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification of, with pentanol)

IT 127428-60-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and coupling of, with glycine derivative, in preparation of enzyme
 substrate)

IT 127428-59-5P 127428-61-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and hydrogenolysis of, in preparation of enzyme substrate)

IT 127428-16-4P 127428-17-5P 127428-18-6P 127428-19-7P 127428-20-0P
 127428-21-1P 127428-22-2P 127428-23-3P 127428-24-4P 127428-25-5P
 127428-26-6P 127428-27-7P 127428-28-8P 127428-29-9P 127428-30-2P
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 127428-36-8P 127428-37-9P 127428-38-0P 127428-39-1P 127428-40-4P
 127428-41-5P 127428-42-6P 127428-43-7P 127428-44-8P 127428-45-9P
 127428-46-0P 127428-47-1P 127428-48-2P 127428-49-3P 127428-50-6P
 127428-51-7P 127428-52-8P 127449-85-8P 127449-86-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as enzyme (trypsin) substrate)

IT 127428-53-9P 127428-54-0P 127428-55-1P 127428-56-2P 127428-57-3P
 127428-58-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for enzyme substrate)

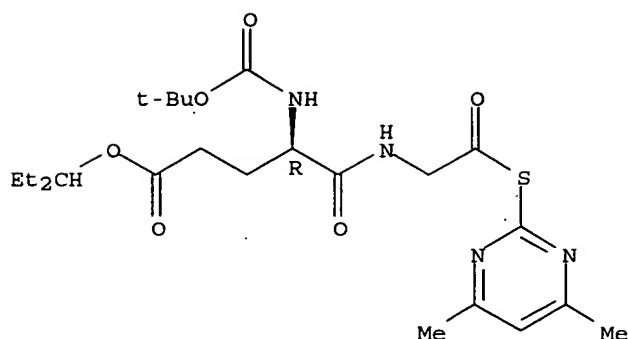
IT 9002-07-7, Trypsin
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (substrates, peptidylarginylnitroanilides)

IT 127428-58-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for enzyme substrate)

RN 127428-58-4 HCAPLUS

CN Glycine, N- [N- [(1,1-dimethylethoxy) carbonyl]-D- α -glutamyl]thio-,
 1-S-(4,6-dimethyl-2-pyrimidinyl) 5-(1-ethylpropyl) ester (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



=> b uspatall

FILE 'USPATFULL' ENTERED AT 07:12:58 ON 15 MAR 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 07:12:58 ON 15 MAR 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr l14 tot

L14 ANSWER 1 OF 3 USPATFULL on STN

AN 2004:114933 USPATFULL

TI Ligation method and reagents to form an amide bond

IN Raines, Ronald T., Madison, WI, UNITED STATES

Kiessling, Laura L., Madison, WI, UNITED STATES

Nilsson, Bradley L., Madison, WI, UNITED STATES

PI US2004087779 A1 20040506

US---6972320 B2 20051206

AI 2003US-0276515 A1 20030123 (10)

2001WO-US15440 20010511

[WO 01/87920 A1]

DT Utility

FS APPLICATION

LREP Greenlee Winner & Sullivan, Suite 201, 5370 Manhattan Circle, Boulder, CO, 80303

CLMN Number of Claims: 58

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 1708

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for the formation of amide bonds between an activated carboxylic acid derivative and an azide useful in the synthesis of peptides, proteins and derivatized or labeled amino acids, peptide or proteins. The method involves the formation of a phosphinothioester which reacts with an azide resulting in amide formation. The invention provides phosphinothiol reagents which convert activated carboxylic acid derivatives to phosphinothioesters which then react with azides to form an amide bond. The methods and reagents of the invention can be used for stepwise synthesis of peptides on solid supports or for the ligation to two or more amino acids, two or more peptide or two or more protein fragments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

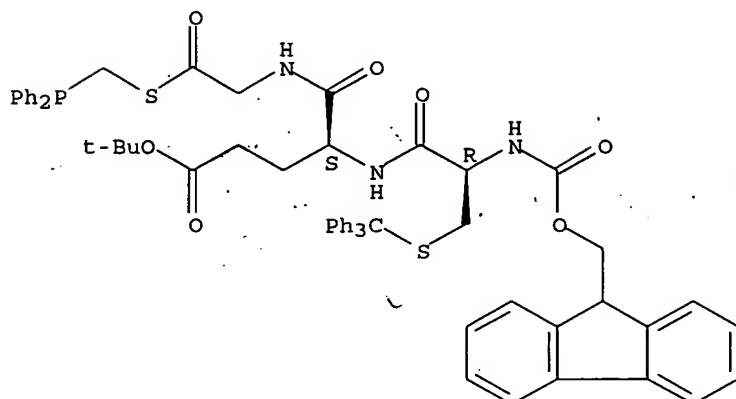
IT 373643-46-0P

(ligation method and reagents to form an amide bond)

RN 373643-46-0 USPATFULL

CN Glycine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-S-(triphenylmethyl)-L-cysteinyl-L- α -glutamylthio-, 2-(1,1-dimethylethyl)
3-S-[(diphenylphosphino)methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L14 ANSWER 2 OF 3 USPATFULL on STN

AN 92:40823 USPATFULL

TI Substrates for determination of enzyme activity and intermediates for synthesis of the substrates as well as process for producing the intermediates

IN Kuroiwa, Katsumasa, Koriyama, Japan
Matsuura, Hitoshi, Koriyama, Japan
Katayama, Katsuhiko, Koriyama, Japan
Nakatsuyama, Shuichi, Koriyama, Japan
Nagasawa, Takeshi, Urawa, Japan
Endo, Koji, Koriyama, Japan

PA Nitto Boseki Co., Ltd., Fukushima, Japan (non-U.S. corporation)

PI US---5115099 19920519

AI 1989US-0365418 19890613 (7)

PRAI 1988JP-0146089 19880614

1988JP-0173788 19880714

DT Utility

FS Granted

EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Walsh, Stephen

LREP Darby & Darby

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 947

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel compounds represented by the following formula: ##STR1## wherein A represents a specific amino acid residue are excellent as substrates for determination of enzyme activity such as trypsin, etc. The compounds can be synthesized from novel arginyl-3-tert-alkyloxycarbonyl-4-nitroanilides by a novel process comprising a selective deprotection step whereby the protecting group on the α -amine group of arginine is removed in the presence of a hydrochloric acid, acetic acid and dimethylformamide mixture, but a tert-alkyl protecting group on the --COOH group of the nitroanilide ring is not removed by this step.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

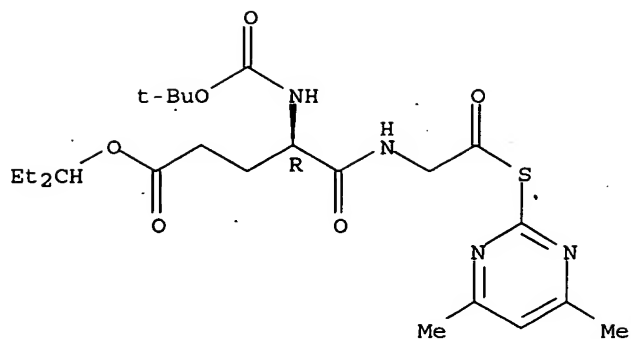
IT 127428-58-4P

(preparation of, as intermediate for enzyme substrate)

RN 127428-58-4 USPATFULL

CN Glycine, N-[N-[(1,1-dimethylethoxy)carbonyl]-D- α -glutamyl]thio-, 1-S-(4,6-dimethyl-2-pyrimidinyl) 5-(1-ethylpropyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L14 ANSWER 3 OF 3 USPAT2 on STN

AN 2004:114933 USPAT2

TI Ligation method and reagents to form an amide bond

IN Raines, Ronald T., Madison, WI, UNITED STATES

Kiessling, Laura L., Madison, WI, UNITED STATES

Nilsson, Bradley L., Madison, WI, UNITED STATES

PA Wisconsin Alumni Research Foundation, Madison, WI, UNITED STATES (U.S. corporation)

PI US---6972320 B2 20051206

WO2001087920 20011122

AI 2003US-0276515 20010511 (10)

2001WO-US15440 20010511

20030123 PCT 371 date

PRAI 2003US-203994P 20000512 (60)

2003US-209373P 20000605 (60)

2003US-255626P 20001213 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Russel, Jeffrey Edwin

LREP Greenlee, Winner and Sullivan, P.C.

CLMN Number of Claims: 58

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1974

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for the formation of amide bonds between an activated carboxylic acid derivative and an azide useful in the synthesis of peptides, proteins and derivatized or labeled amino acids, peptide or proteins. The method involves the formation of a phosphinothioester which reacts with an azide resulting in amide formation. The invention provides phosphinothiol reagents which convert activated carboxylic acid derivatives to phosphinothioesters which then react with azides to form an amide bond. The methods and reagents of the invention can be used for stepwise synthesis of peptides on solid supports or for the ligation to two or more amino acids, two or more peptide or two or more protein fragments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

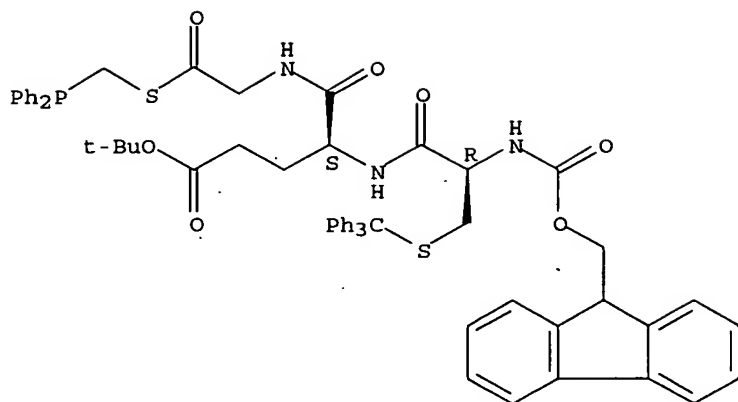
IT 373643-46-0P

(ligation method and reagents to form an amide bond)

RN 373643-46-0 USPAT2

CN Glycine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-S-(triphenylmethyl)-L-cysteinyl-L- α -glutamylthio-, 2-(1,1-dimethylethyl)-3-S-[(diphenylphosphino)methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



(FILE 'HOME' ENTERED AT 06:55:58 ON 15 MAR 2006)

L1	1	US2004063902/PN OR (US2003-622359 OR US2002-398891#)/AP, PRN E MIRANDA L/AU
L2	13	E3, E18 E MIRANDA LESLIE/AU
L3	7	E3-6
L4	74	GRYPHON/CS, PA

FILE 'HCAPLUS' ENTERED AT 06:59:15 ON 15 MAR 2006
L5 TRA L1 1- RN : 5 TERMS

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L6          5 SEA L5
L7          3 L6 AND (S OR SE)/ELS
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L10         3 L8 FULL
            SAV TEM L10 AUD359F0/A

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L11      3 L10
L12      3 L11 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
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L14 3 L10

L15 0 L11-12 AND L1-4

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